

that an indistinct, imperfectly formed "nucleus" is often seen; and the shadowy substance seen in many of the smaller oviparous cells after they have been mounted for some time is very like that seen under similar circumstances in some of the corpuscles of Mammalia. Many, too, affirm that these corpuscles do not exhibit that distinction of wall and contents which is generally described. It appears to me that this difference of opinion depends on the changes they are prone to undergo. How far the absence of a distinctly defined "nucleus" after death depends on their smaller size I am not prepared to say.

Many questions of course follow. For example, how far is this separation of the substance of a homogeneous* corpuscle into nucleus, cell-membrane, and contents to be compared to the coagulation of the blood? and how do the agents which are known to influence the one process affect the other? A still further and more important question is, How are these changes in the corpuscles, and in the blood around them, related? But in this paper I propose to go no further than the statement that the red corpuscle of all vertebrata is, in its natural state, structureless. When living, no distinction of parts can be recognized; and the existence of a nucleus in the red corpuscles of ovipara is due to changes after death, or removal from the vessels.

I cannot conclude this paper without acknowledging the great help I have received in this investigation from Mr. Howard Marsh, Demonstrator of Microscopical Anatomy at St. Bartholomew's Hospital.

MISCELLANEOUS.

Note on a new Hermaphrodite Chætopod Annelid.

By G. MOQUIN-TANDON.

THE group of Chætopod Annelida was long regarded as consisting entirely of unisexual animals. In 1857, Mr. Huxley made known the first exception to this general law in a new Annelid of the English coast, *Protula Dysteri*. A few years later, M. Pagenstecher, while staying on the shores of the Mediterranean at Cette, discovered the same fact in another species of the same family, *Spirorbis spirillum*. Lastly, a third fact of the same kind was observed by M. Claparède in a species of *Amphiglena* (*A. mediterranea*). This naturalist also confirmed the exactitude of Mr. Huxley's observations, and showed, by his investigation of a great number of Serpulea, that these cases of monœciousness are exceptional in this family.

I have discovered another example of hermaphroditism, but this time in a dorsibranchiate Annelid belonging to the genus *Nereis*. I believe that this species is new, and propose to name it *Nereis mas-*

* By the word homogeneous I do not mean to affirm that the substance of the corpuscle is of equal consistence throughout. The central may be the softest part of it. But I regard the corpuscle, in its whole substance, as "having the same nature."

siliensis. The following are its principal characters:—Middle antennæ short, subulate; lateral antennæ stout, shorter, composed of two joints—the basal thick, the terminal very small; the two superior tentacles long, reaching as far as the eighth segment, the two inferior shorter, but exceeding the antennæ; jaws strong, curved, presenting twelve teeth; no denticles; feet like those of *Nereis bilineata*. The body, which is 4–5 centimetres in length, has from sixty to seventy segments of a greenish-brown colour, marked with numerous vinose spots irregularly arranged.

This species occurs pretty frequently on the shore at Marseilles, among *Ulva*. It inhabits a membranous tube, constructed in a fold of the fronds of that plant, and is herbivorous. Of eleven individuals that I dissected, nine contained, pell-mell in the cavity of the body, spermatozoids and ova in different stages of development. The mature ova observed in the general cavity are yellowish, and 0·37 millim. in diameter. The free spermatozoids floating in the visceral fluid are composed of a bacilliform anterior part (head) 0·01 millim. in length by 0·0017 millim. in breadth, and of an excessively thin tail, 0·45 millim. in length. The tail is very different, both in its length and the nature of its movements, from the vibratile cilia of the cavity of the body.

The two individuals in which I did not detect hermaphroditism were females, and had the body filled with a great quantity of ova, all arrived at maturity.—*Comptes Rendus*, April 12, 1869, tome lxxviii. pp. 869, 870.

The Poison-glands of Callophis intestinalis and C. bivirgatus.

By A. BERNHARD-MEYER.

The author has detected poison-glands in the above-mentioned snakes. He found them first in *Callophis intestinalis*, Laur. (*Elaps furcatus*, Schneid.), whilst engaged in an investigation of the position of the heart in serpents. He found the heart in this species thrown far back towards the tail, in consequence of the presence of two extended, brown organs above the heart, which proved to be the poison-glands. They are distinguished from those of other serpents by their length and by their situation just below the ribs in the ventral cavity. With their excretory ducts they occupy one-third or even more of the total length of the snake.

The true gland is entirely enveloped by a striated muscle, within which the smooth, white tendinous surface is concealed. It is formed of parallel tubes, among which the parenchyma of the gland occurs divided into little portions. In the middle the number of tubes is fifteen or more. They unite upon a large excretory duct in each gland. The excretory ducts run side by side to the head, where they are applied against the outer surfaces of the quadrate and maxillary bones; here a large salivary gland opens into each.

The author has detected the same glands in *Callophis bivirgatus*, Boié; but they do not exist in *C. calligaster*, which, however, does not belong to *Callophis*, or in the Elapid snakes of Australia (*Vermicella*, Gray), Africa (*Pœcilophis*, Gthr.), or America.—*Comptes Rendus*, April 12, 1869, tome lxxviii. p. 860.